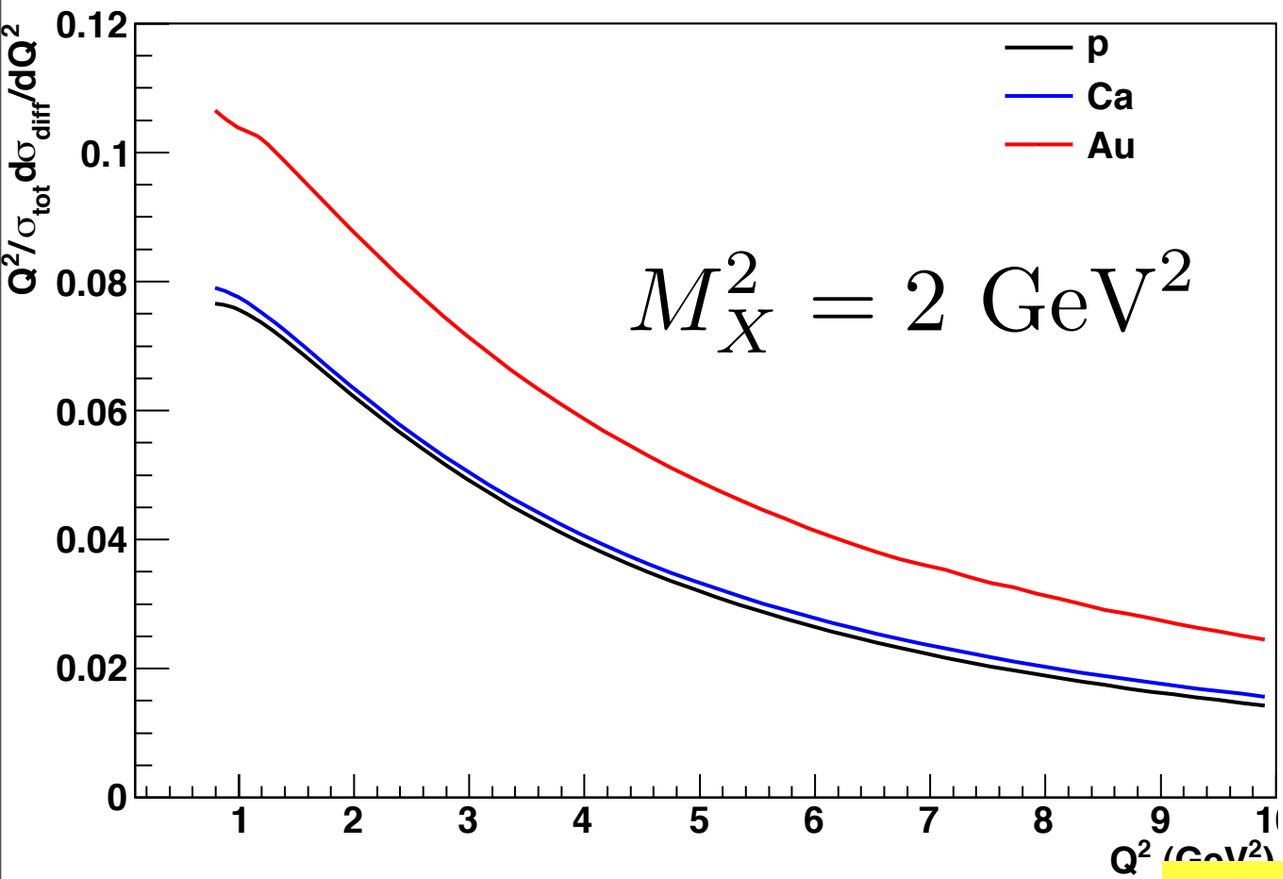
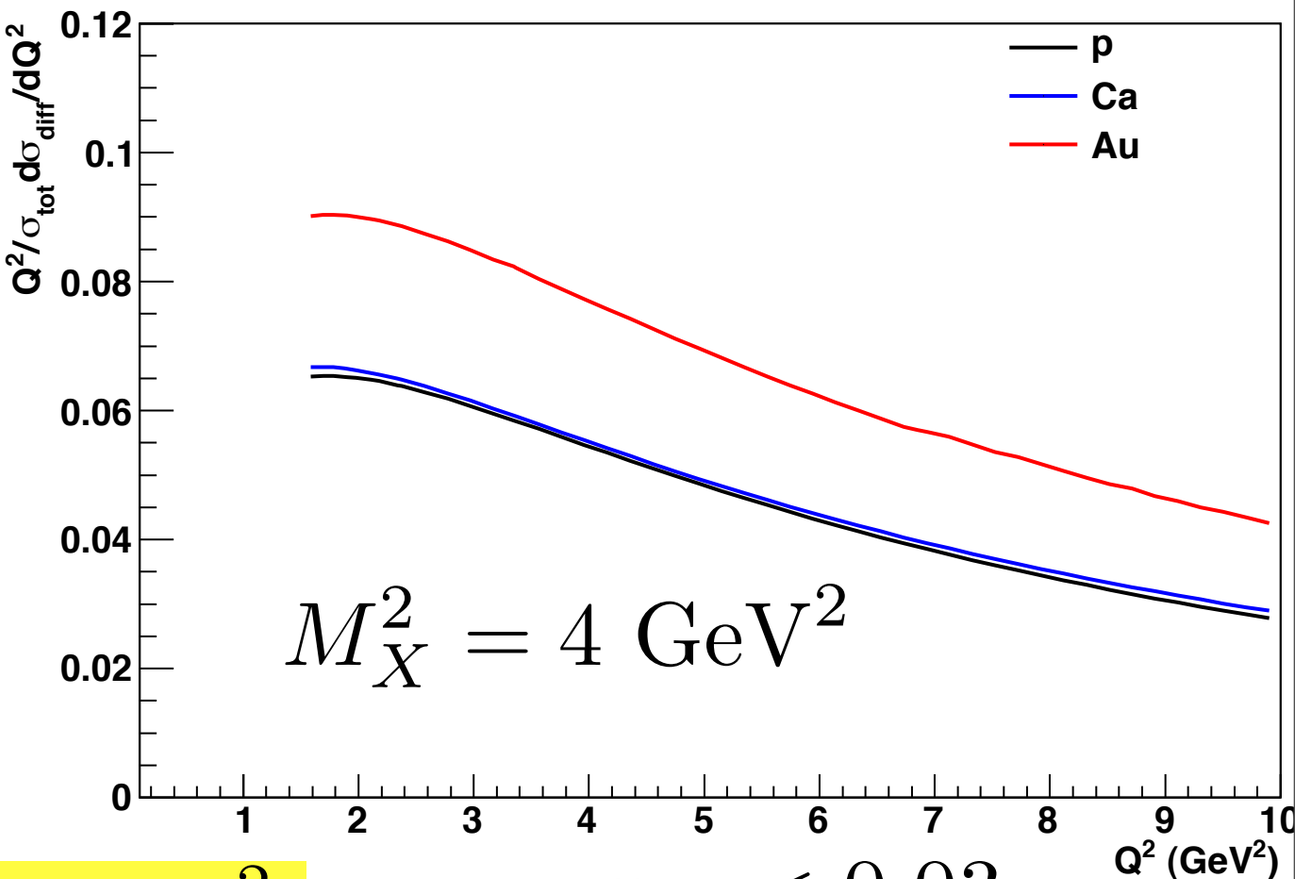
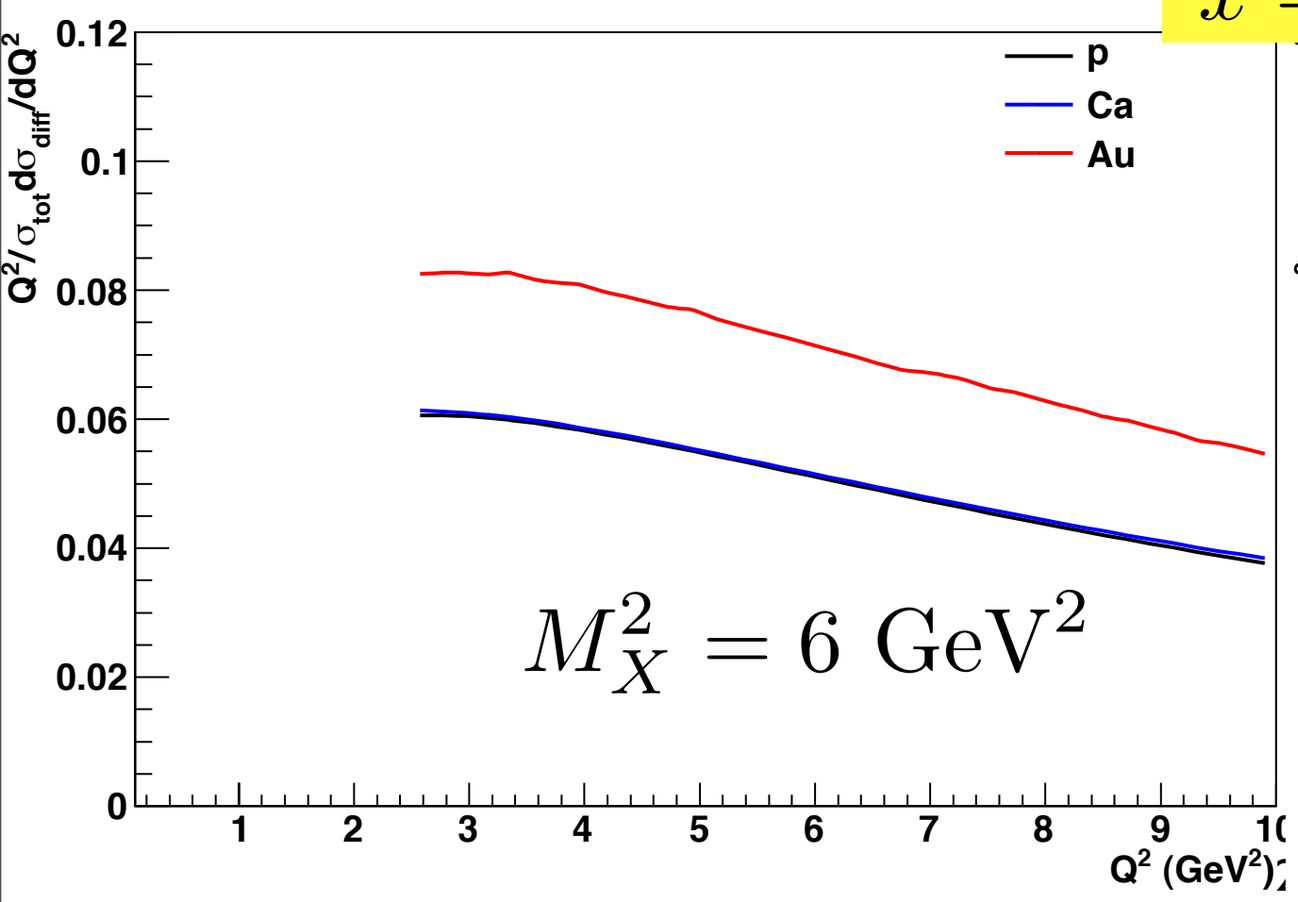
New Plots
Inclusive Diffraction
with bSat

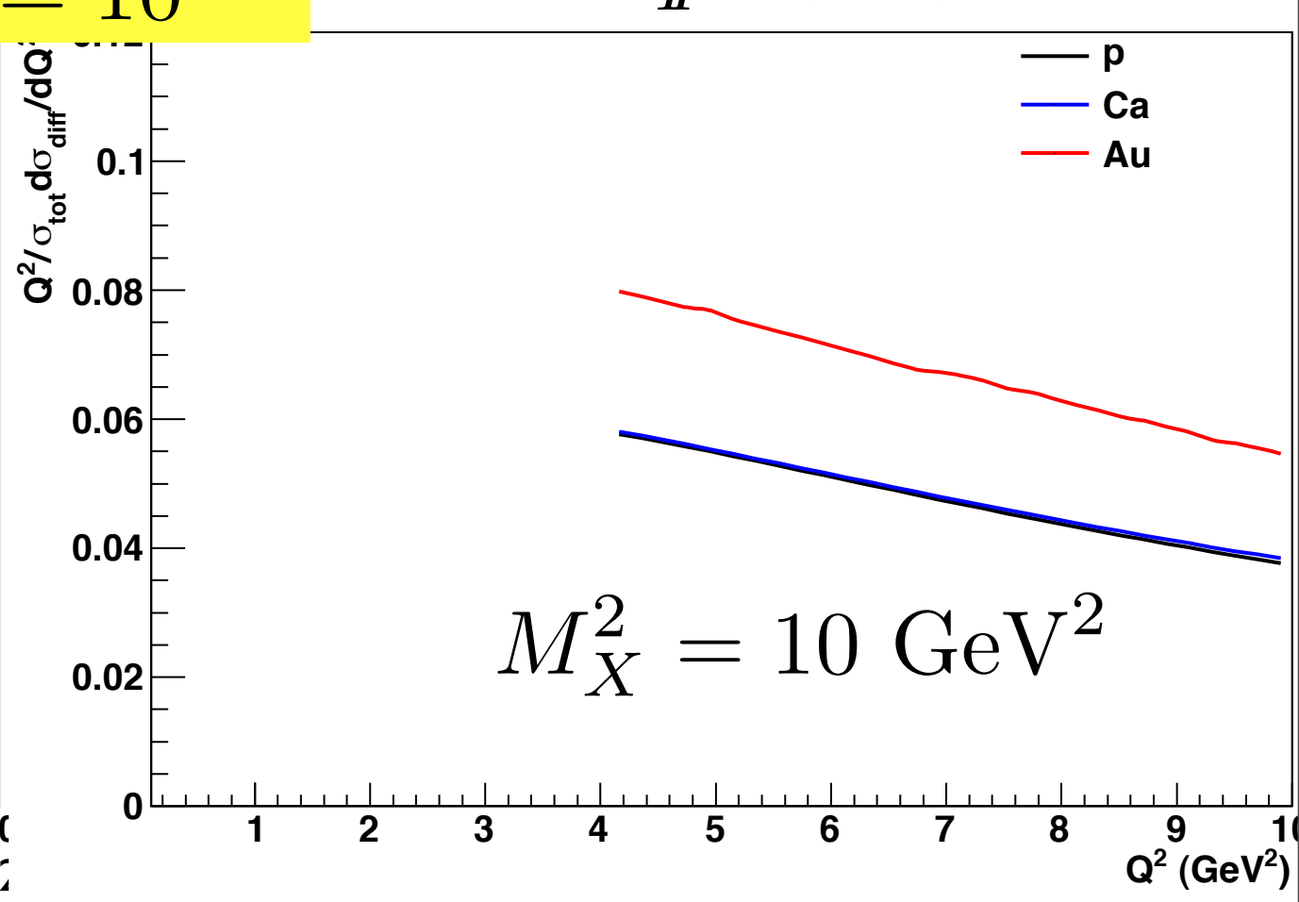

p
Ca
Au
$M_X^2 = 2\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

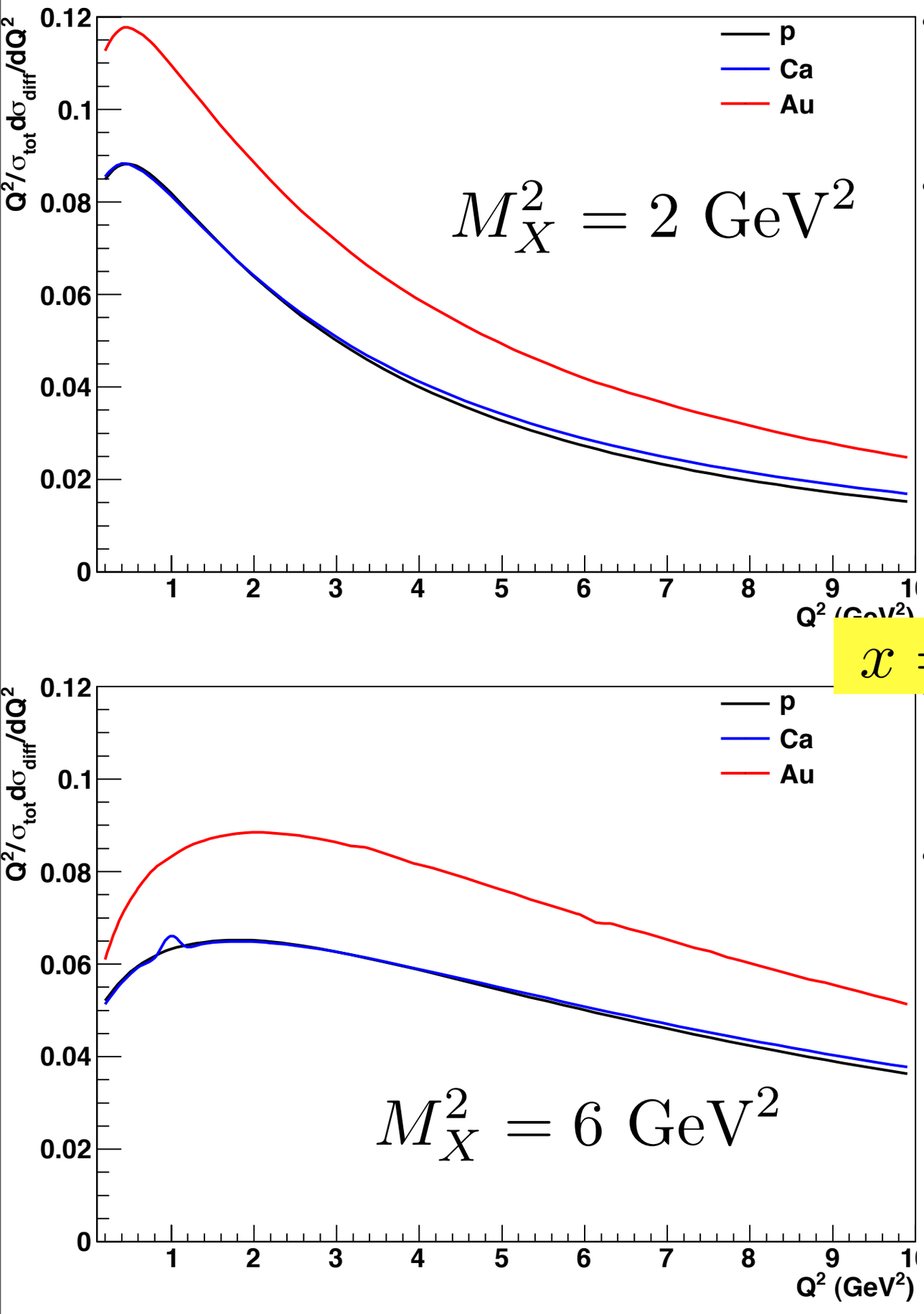

p
Ca
Au
$M_X^2 = 4\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

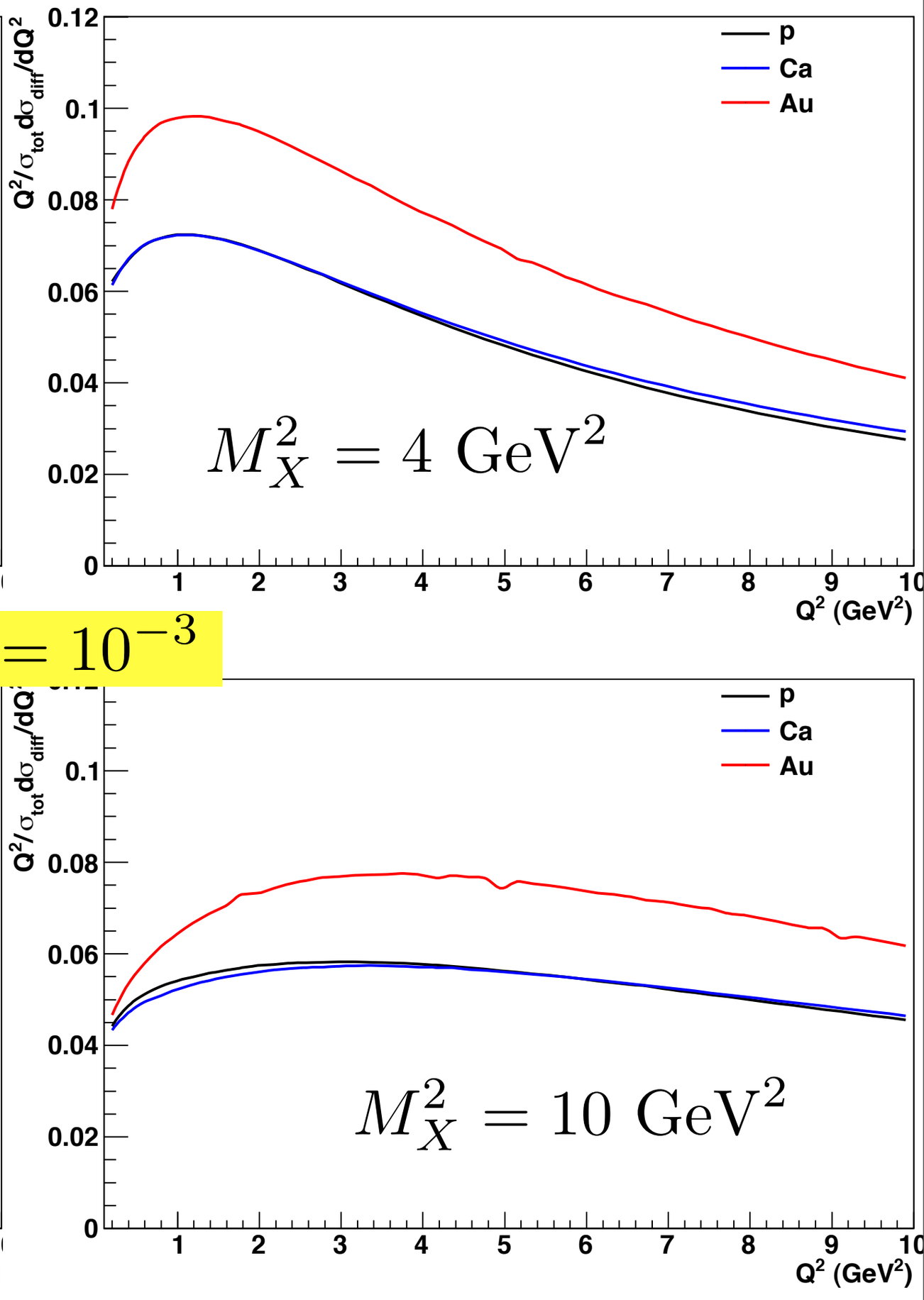
$x = 10^{-2}$

$x_{I\!P} < 0.03$


p
Ca
Au
$M_X^2 = 6\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)


p
Ca
Au
$M_X^2 = 10\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)


p
Ca
Au
$M_X^2 = 2\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

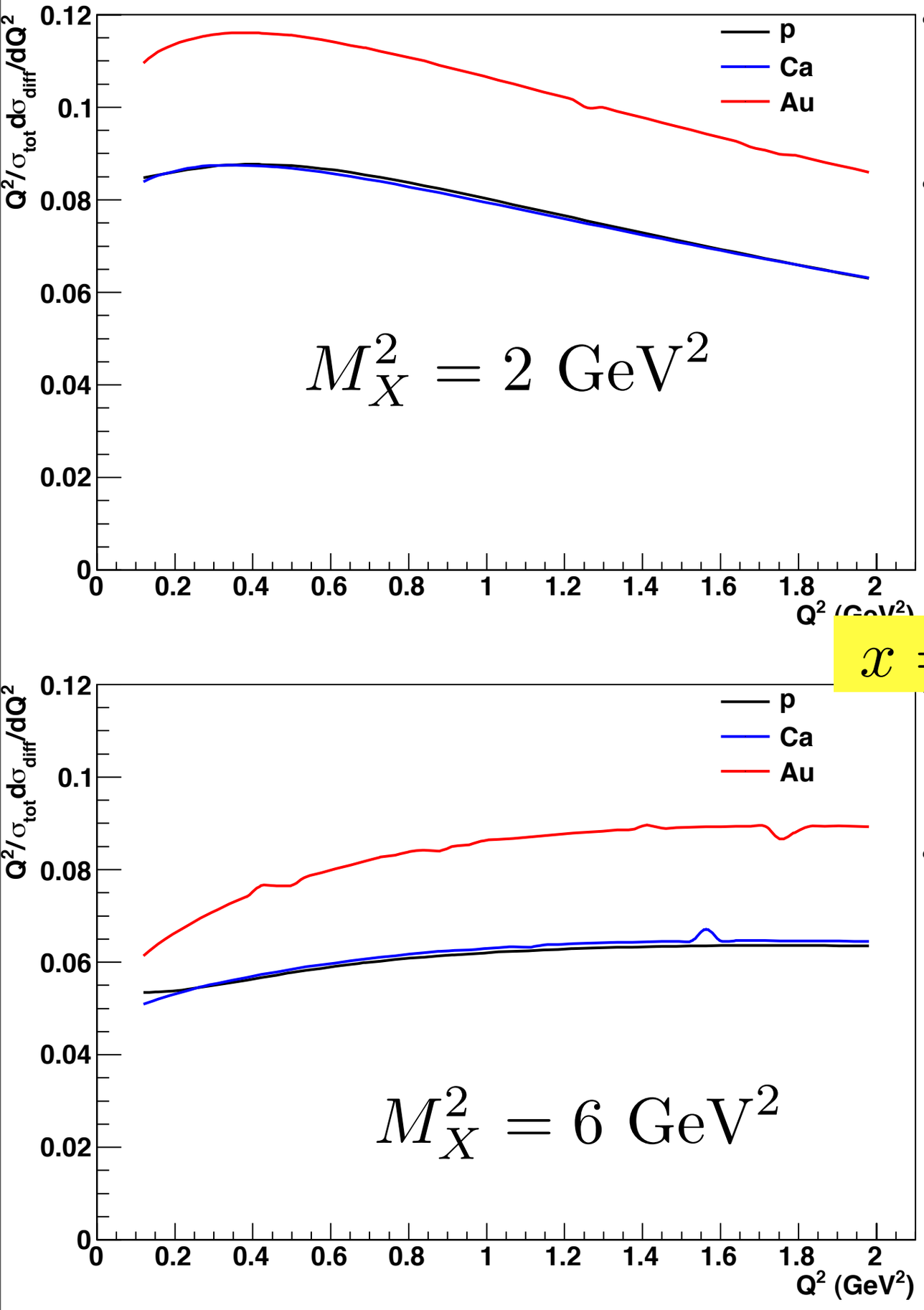

p
Ca
Au
$M_X^2 = 4\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

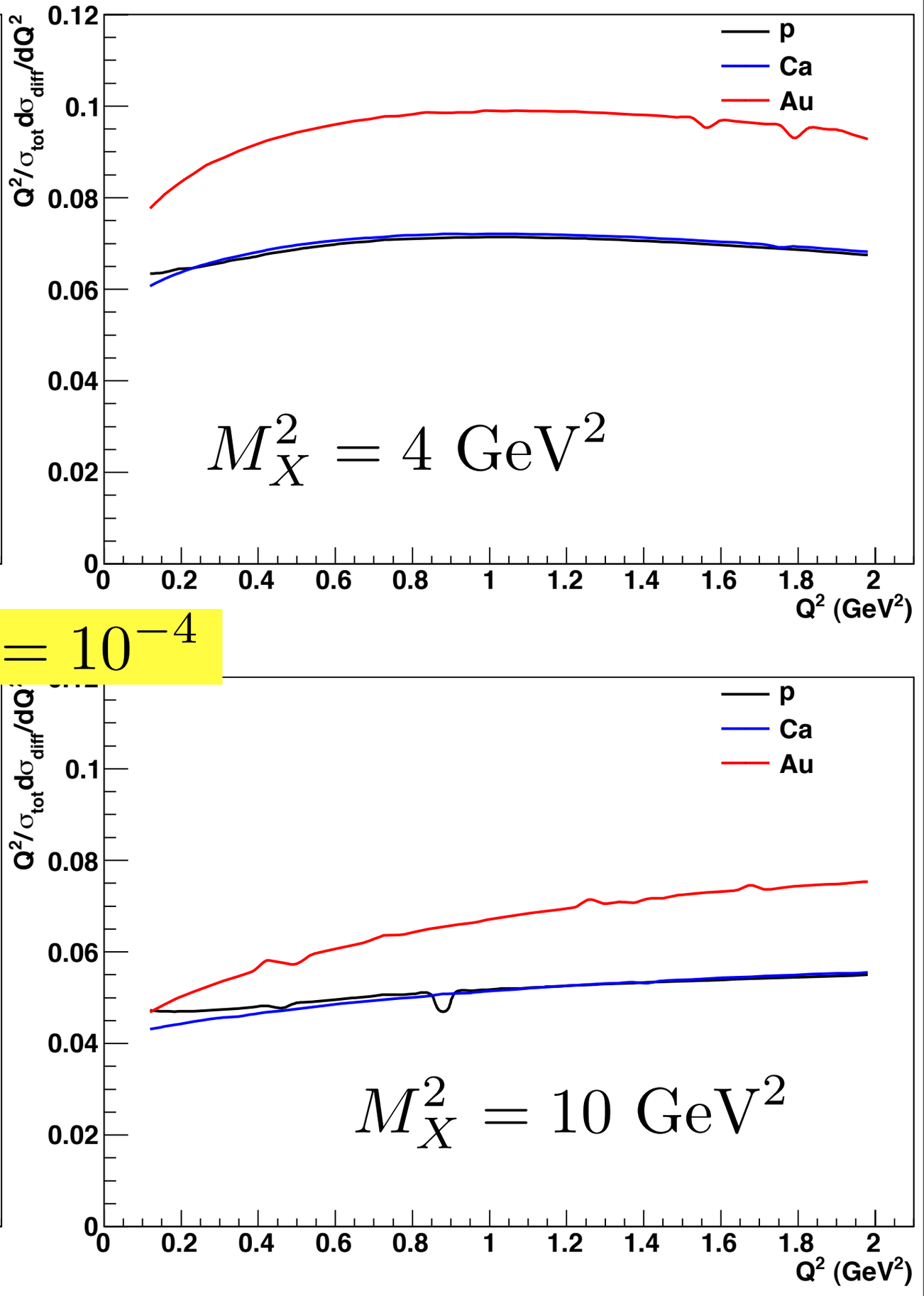
$x = 10^{-3}$

p
Ca
Au
$M_X^2 = 6\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

p
Ca
Au
$M_X^2 = 10\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

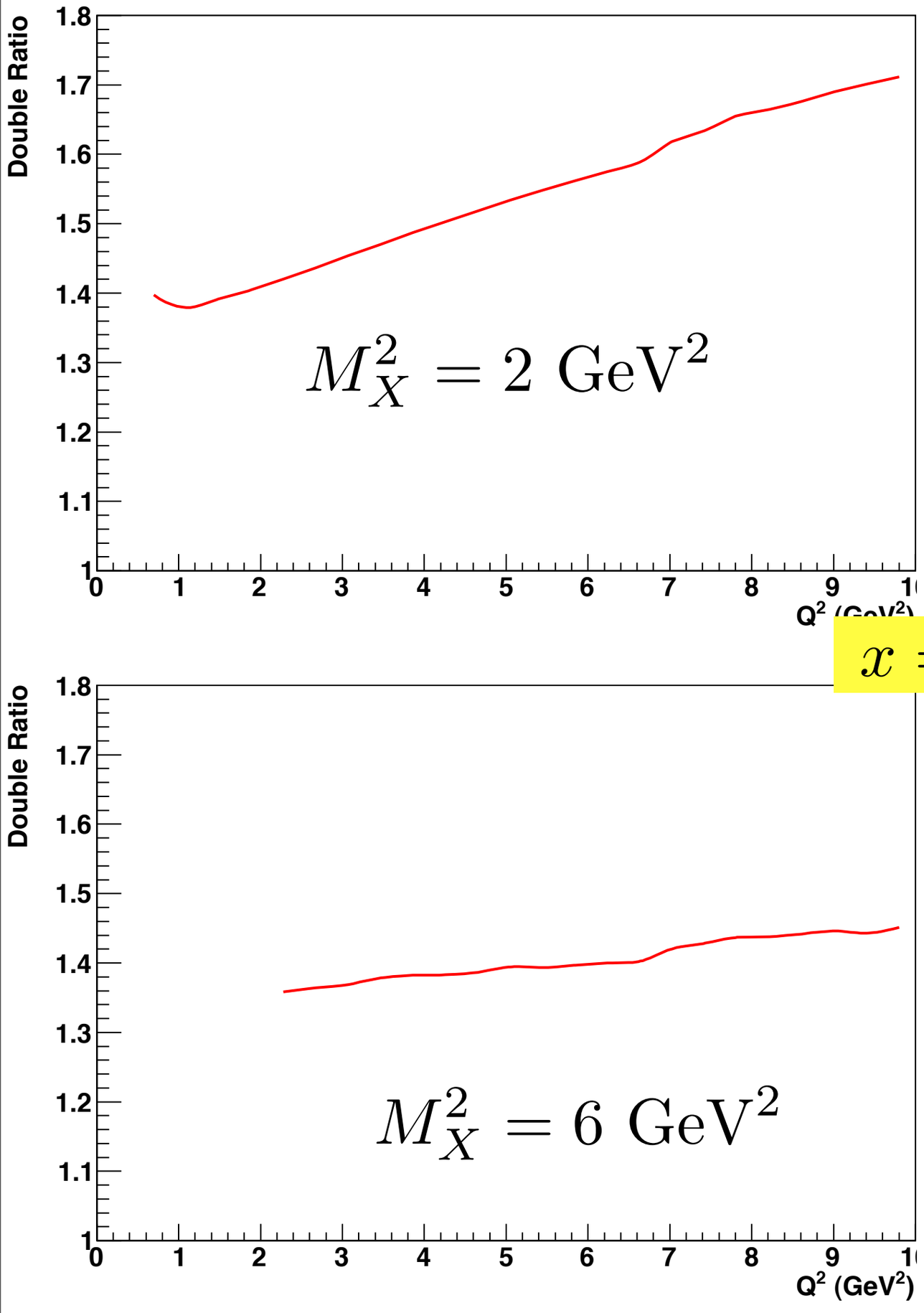
$x = 10^{-4}$

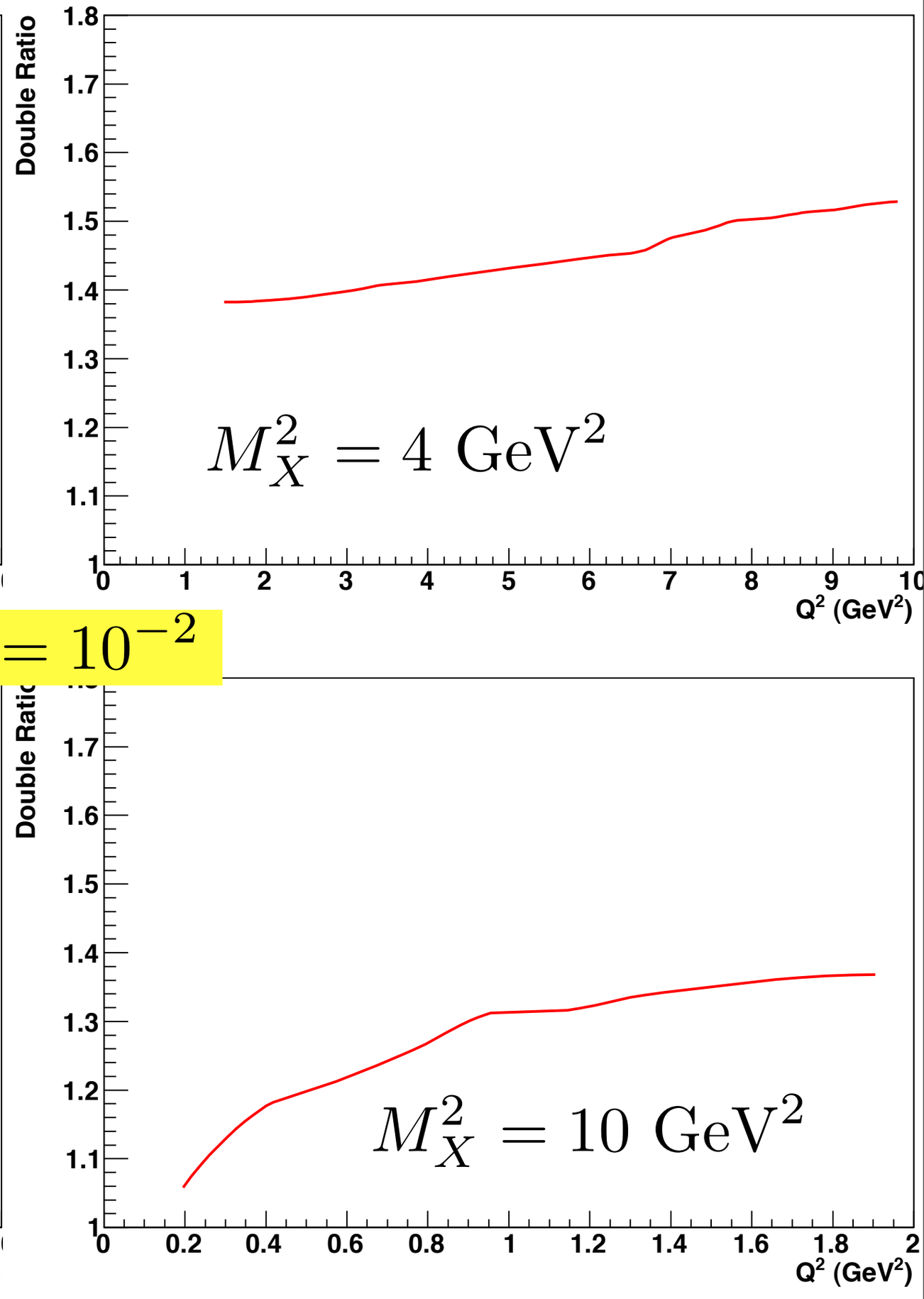

p
Ca
Au
$M_X^2 = 2\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)


p
Ca
Au
$M_X^2 = 4\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

p
Ca
Au
$M_X^2 = 6\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)

p
Ca
Au
$M_X^2 = 10\ \mathrm{GeV}^2$
$Q^2/\sigma_{tot} d\sigma_{diff}/dQ^2$
Q^2 (GeV^2)


Double Ratio
$M_X^2 = 2\ \mathrm{GeV}^2$
$Q^2\ (\mathrm{GeV}^2)$

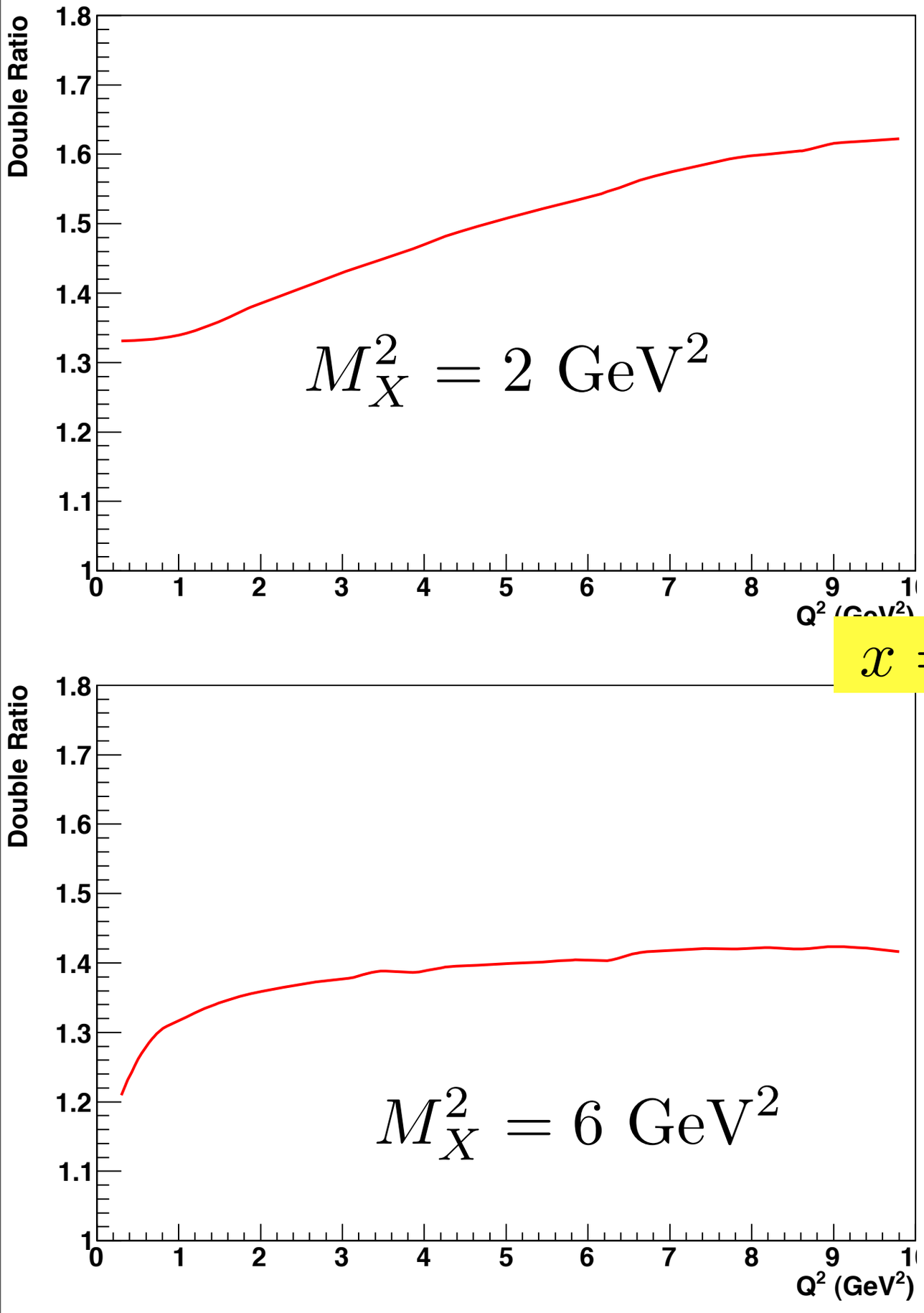

Double Ratio
$M_X^2 = 4\ \mathrm{GeV}^2$
$Q^2\ (\mathrm{GeV}^2)$

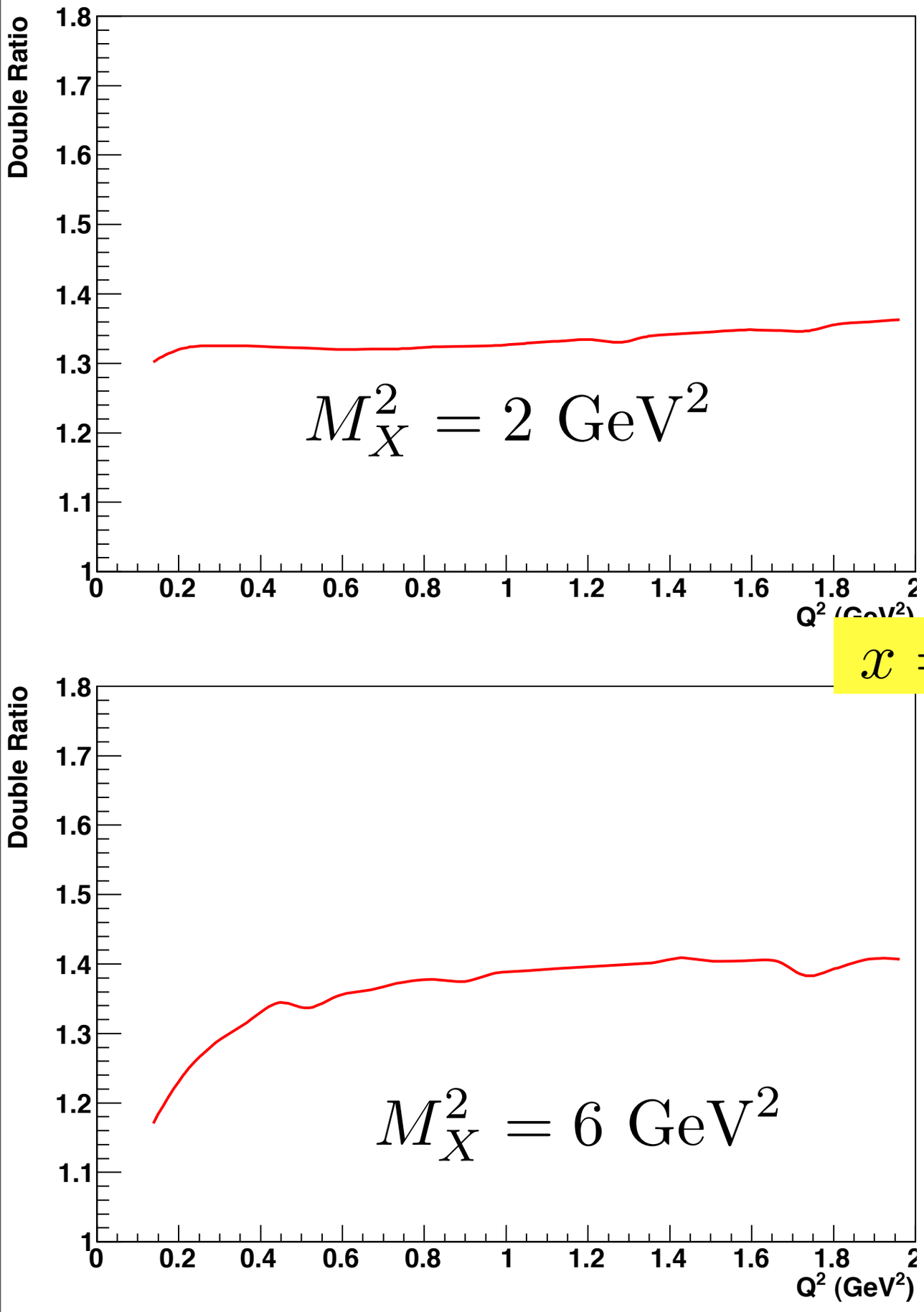
$x = 10^{-2}$

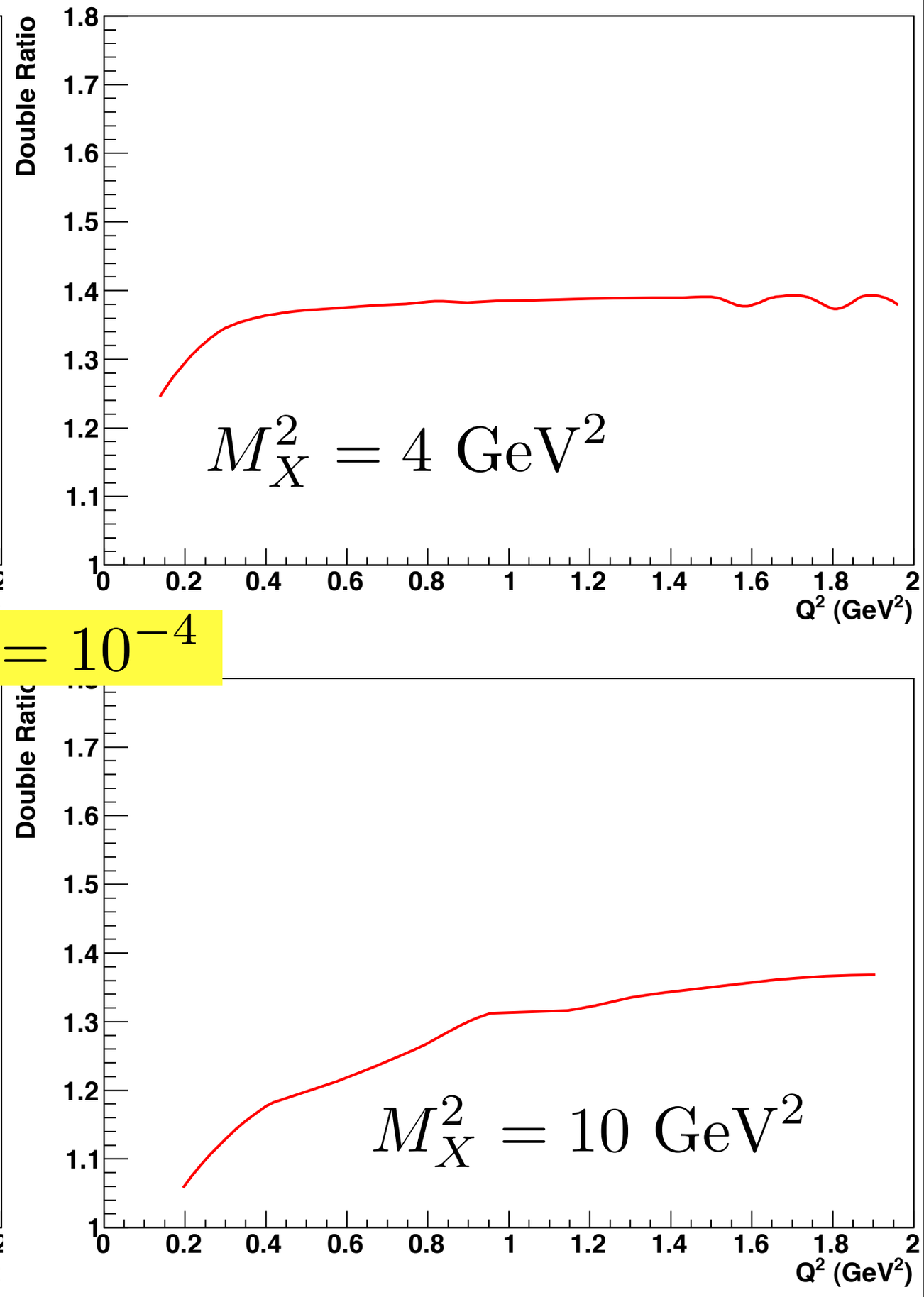
Double Ratio
$M_X^2 = 6\ \mathrm{GeV}^2$
$Q^2\ (\mathrm{GeV}^2)$

Double Ratio
$M_X^2 = 10\ \mathrm{GeV}^2$
$Q^2\ (\mathrm{GeV}^2)$

$x = 10^{-3}$


Double Ratio
$M_X^2 = 2\ \mathrm{GeV}^2$
$M_X^2 = 4\ \mathrm{GeV}^2$
$M_X^2 = 6\ \mathrm{GeV}^2$
$M_X^2 = 10\ \mathrm{GeV}^2$
$Q^2\ (\mathrm{GeV}^2)$


Double Ratio
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
Q² (GeV²)
$M_X^2 = 2\ \mathrm{GeV}^2$


Double Ratio
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
Q² (GeV²)
$M_X^2 = 4\ \mathrm{GeV}^2$

$x = 10^{-4}$

Double Ratio
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
Q² (GeV²)
$M_X^2 = 6\ \mathrm{GeV}^2$

Double Ratio
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
Q² (GeV²)
$M_X^2 = 10\ \mathrm{GeV}^2$

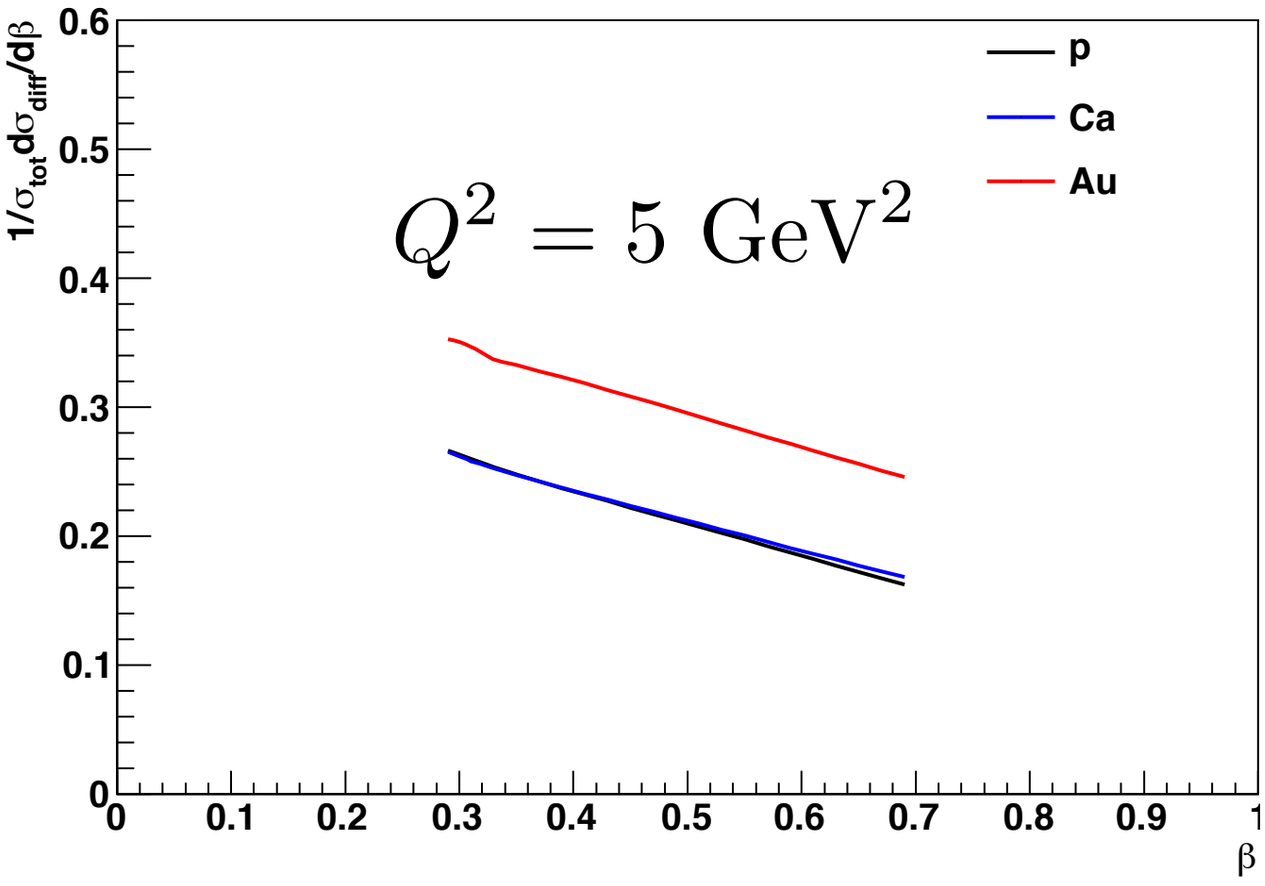
$$x = 10^{-2}$$

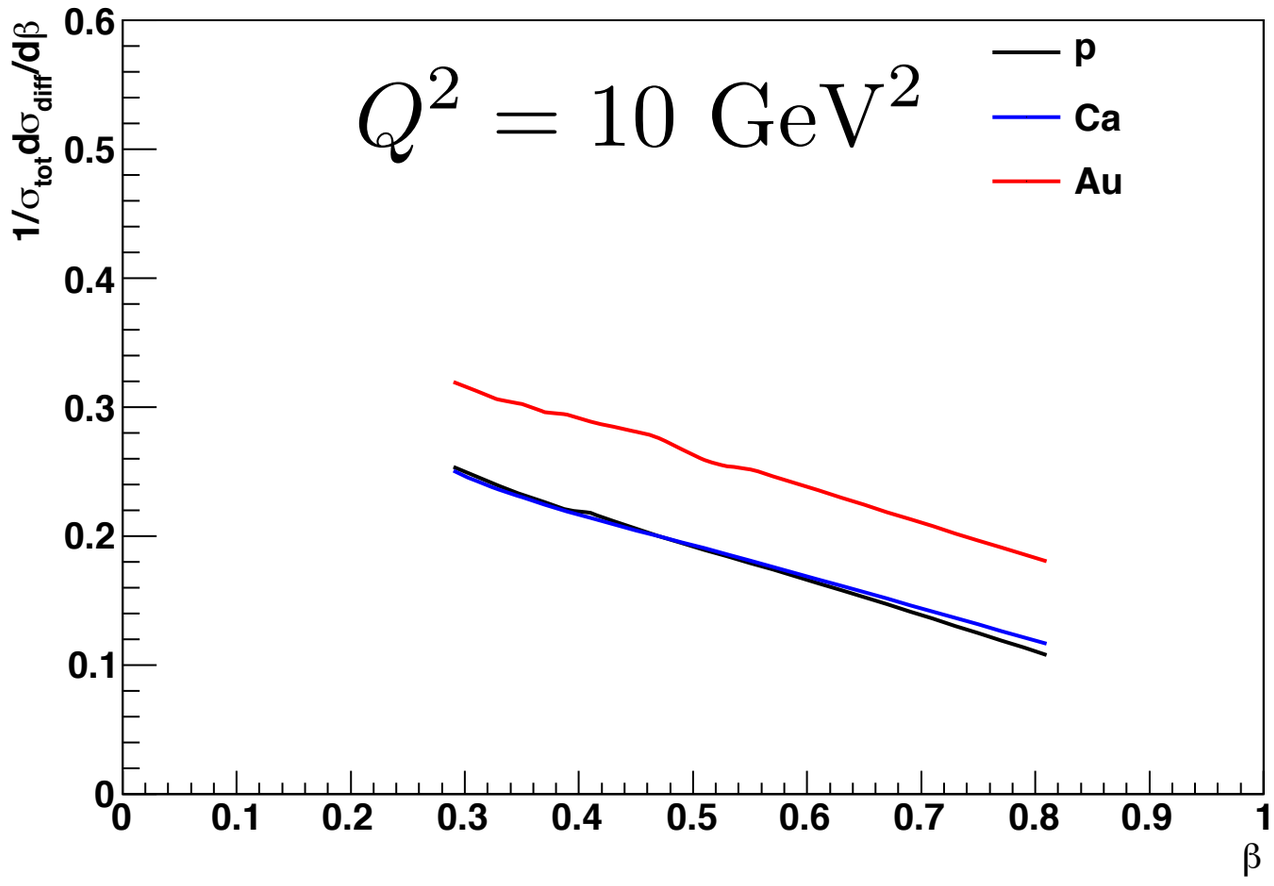
$$\beta = \frac{Q^2}{Q^2 + M_X^2}$$

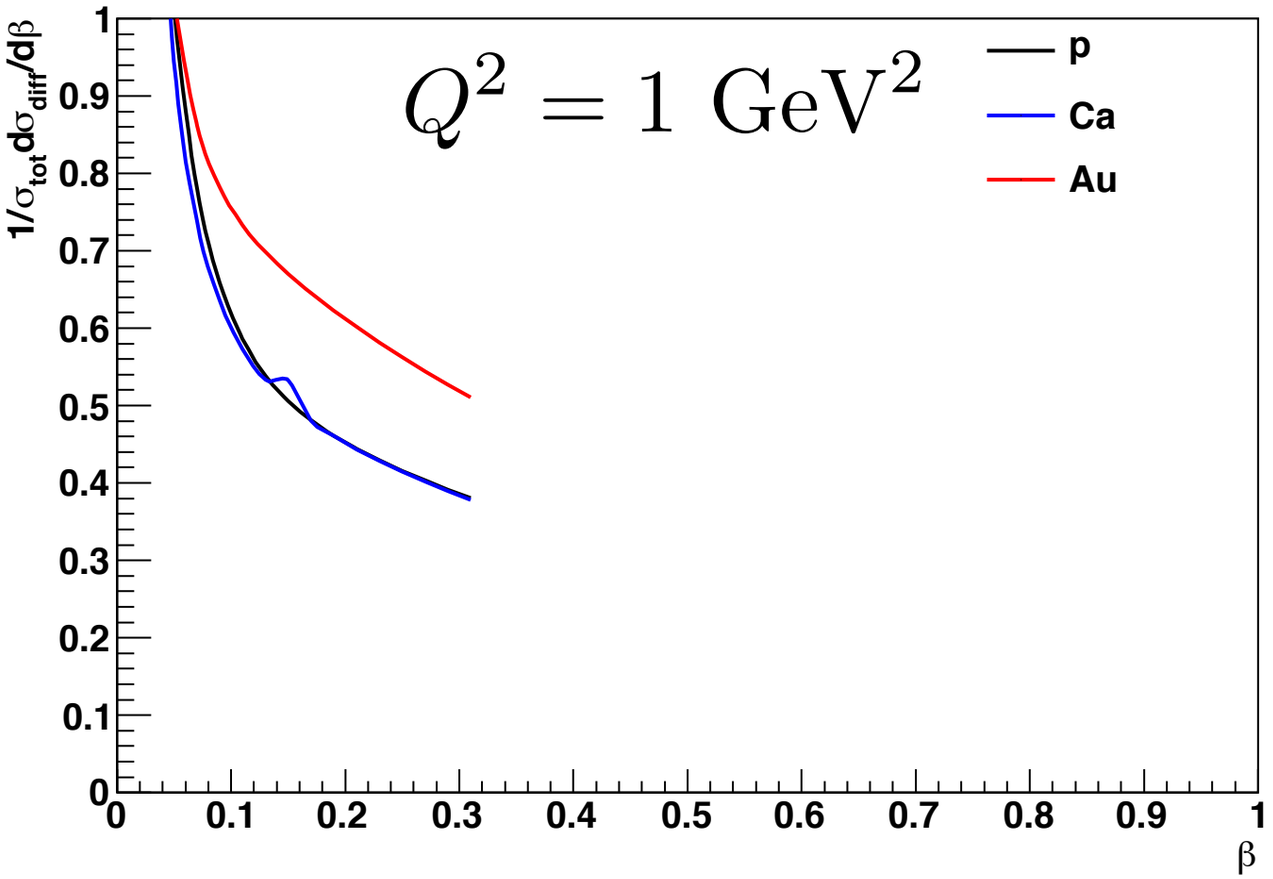
Constraints

Large β: $M_X^2 > 2\ \mathrm{GeV}^2$

Small β: $x_{I\!P} < 0.03$







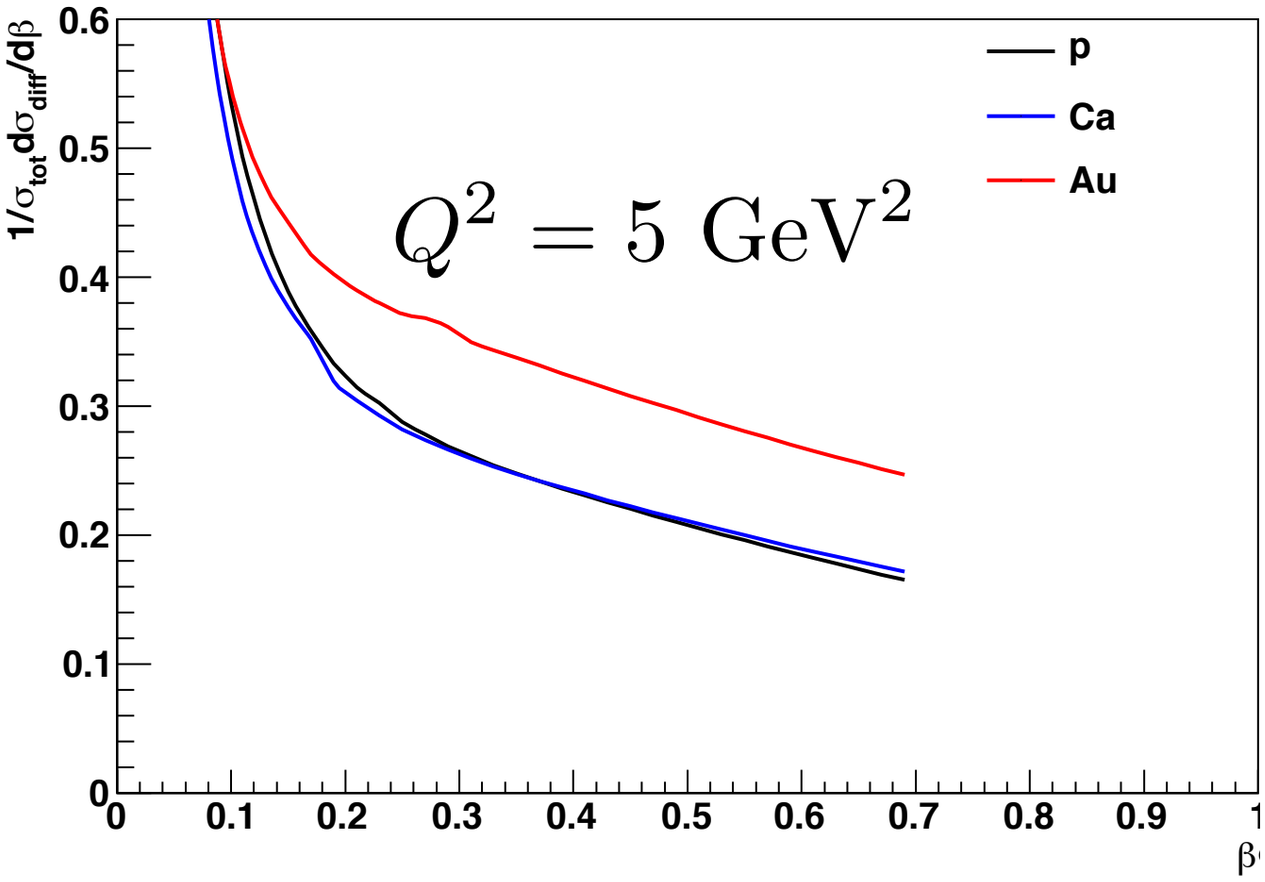
$$x = 10^{-3}$$

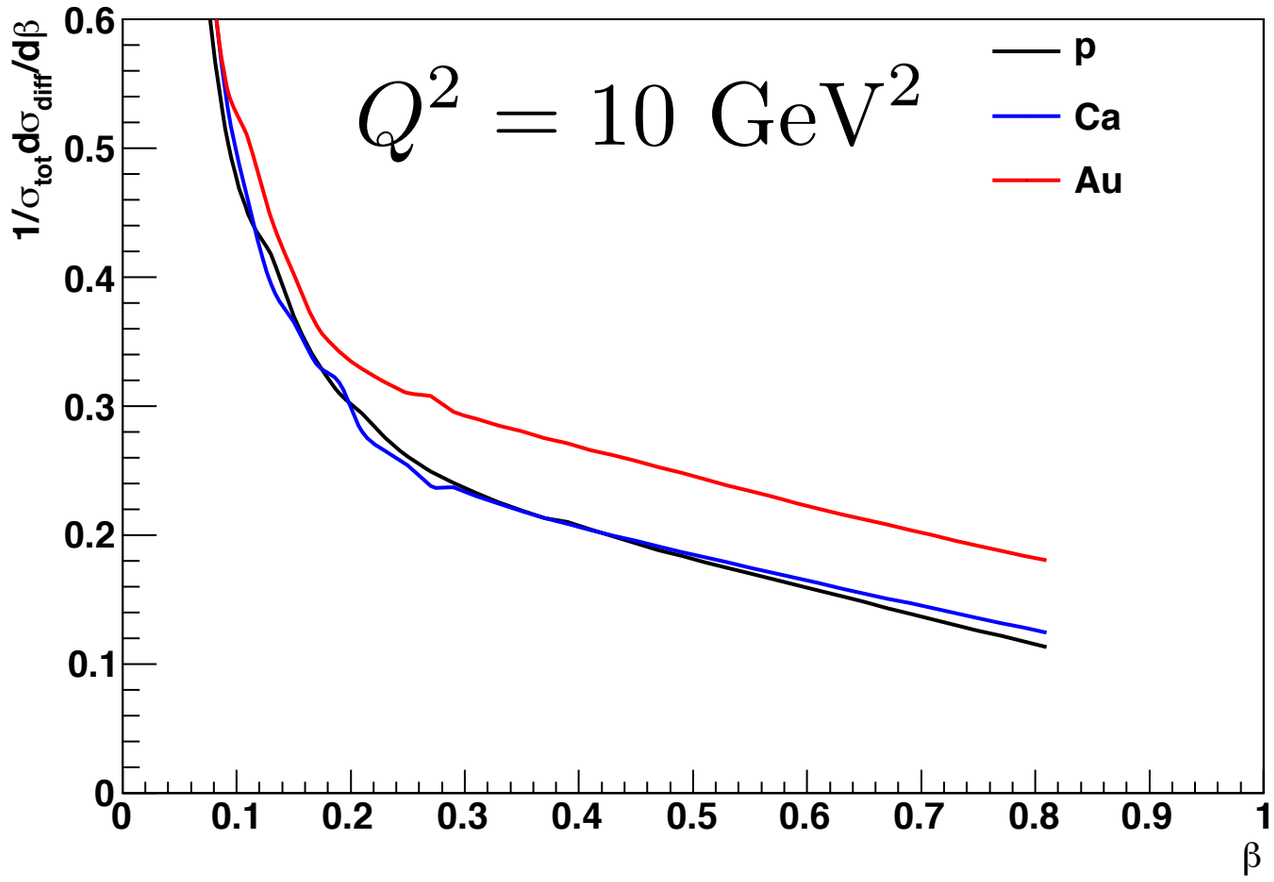
$$\beta = \frac{Q^2}{Q^2 + M_X^2}$$

Constraints

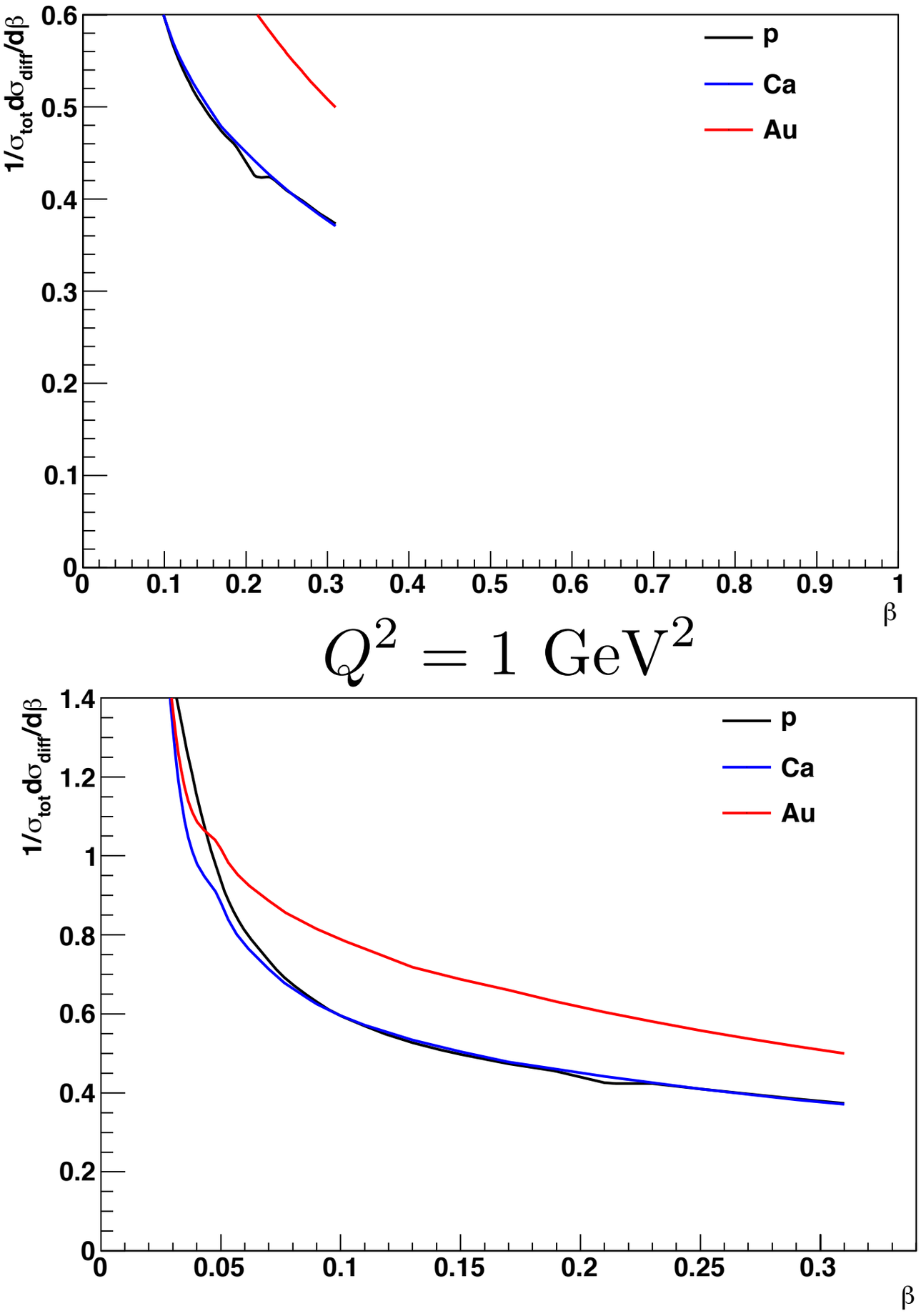
Large β: $M_X^2 > 2$ GeV^2

Small β: $x_{I\!P} < 0.03$



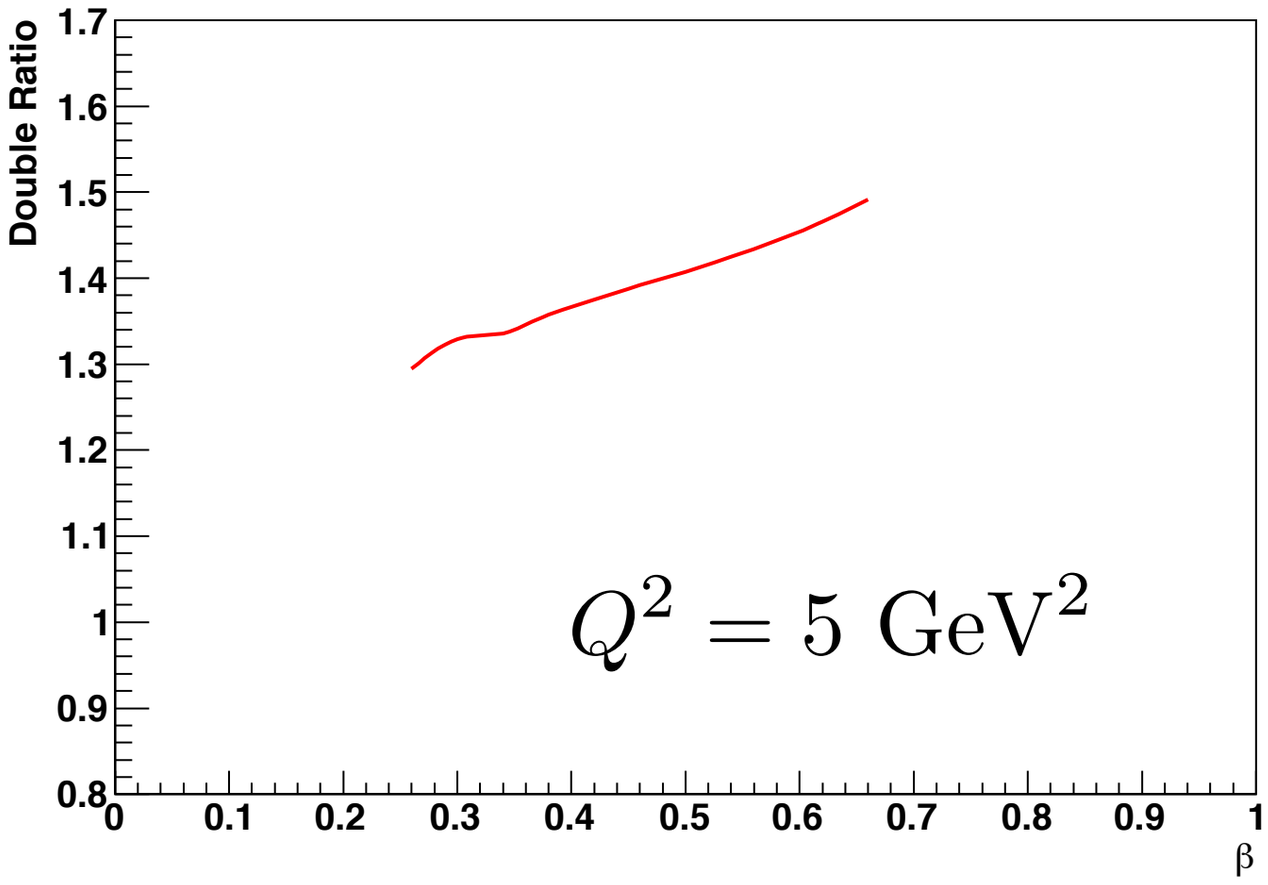


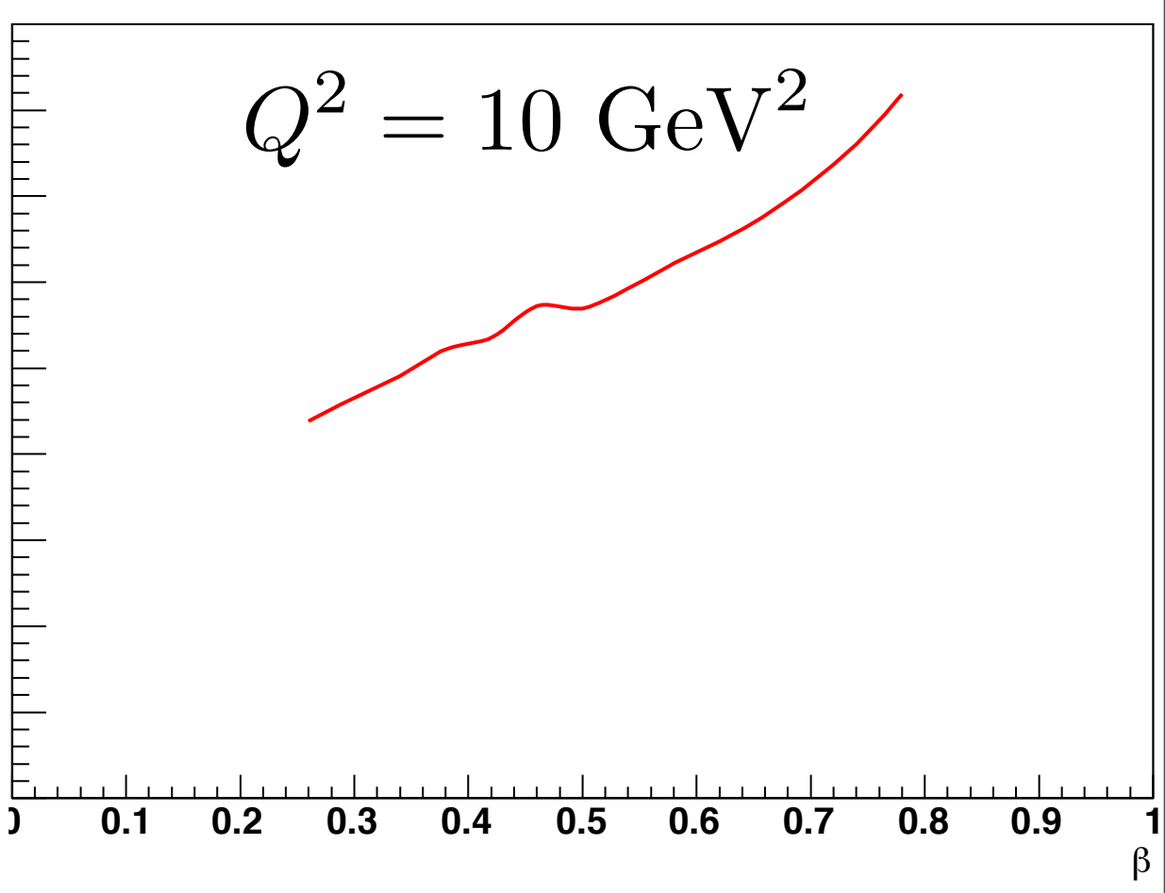
$$x = 10^{-4}$$



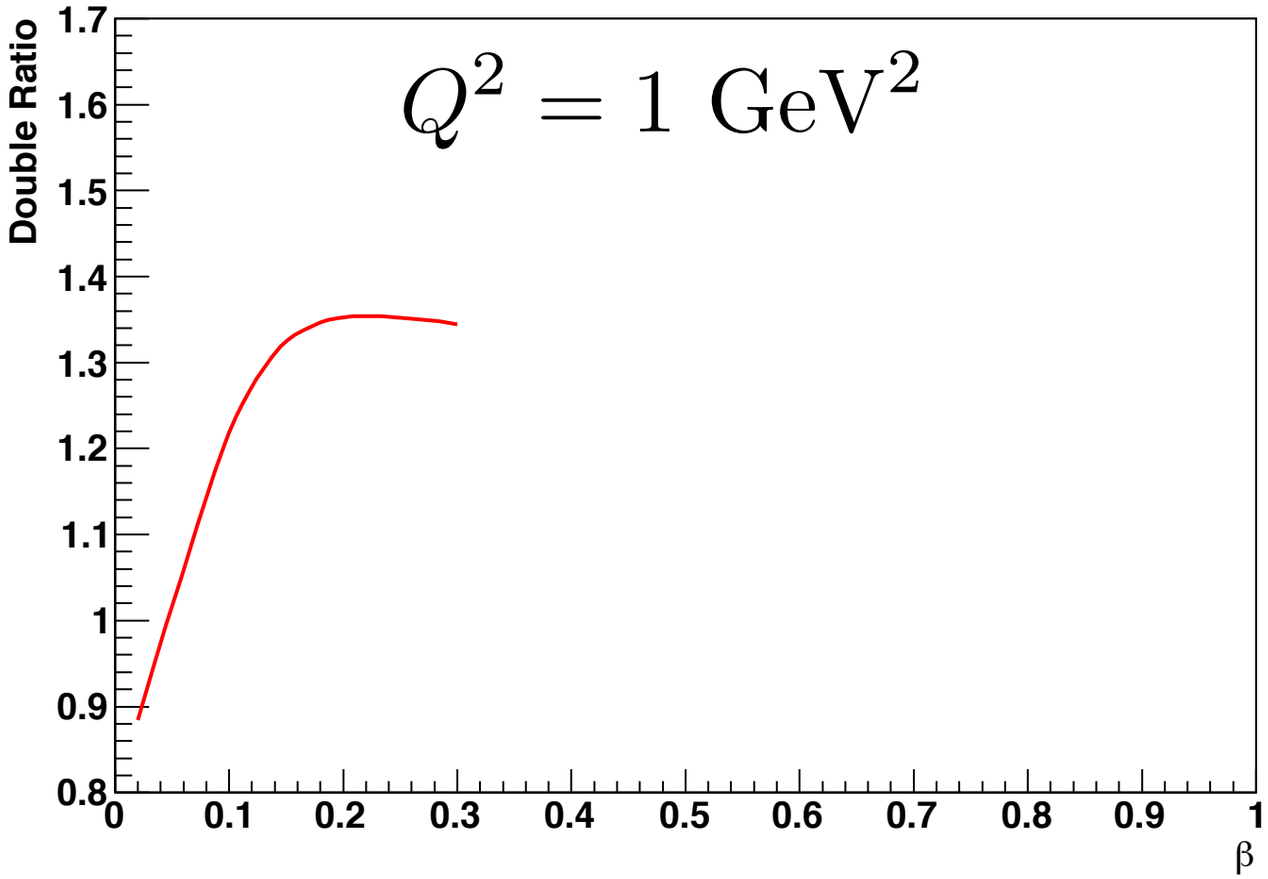
$$Q^2 = 1\ \mathrm{GeV}^2$$

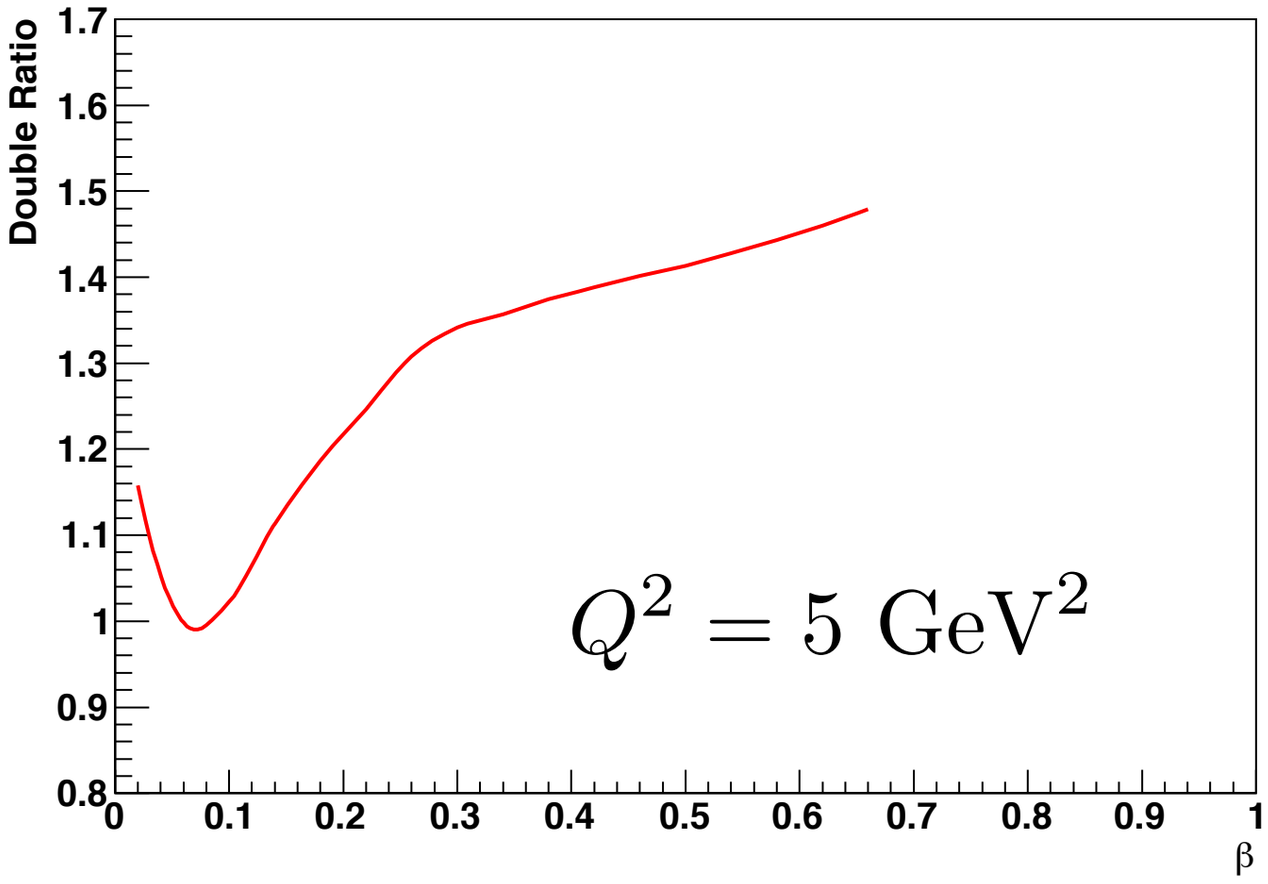
$x = 10^{-2}$

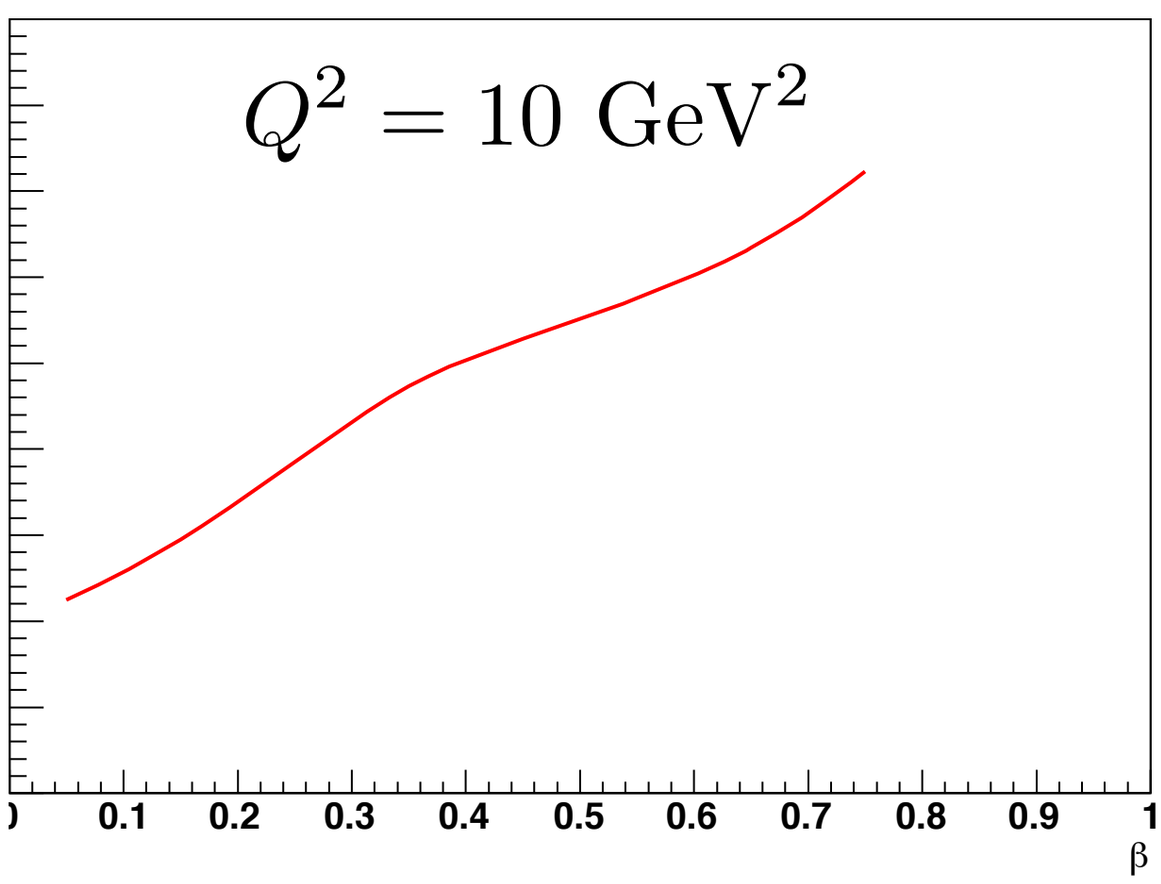

Double Ratio
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
β
$Q^2 = 5$ GeV^2

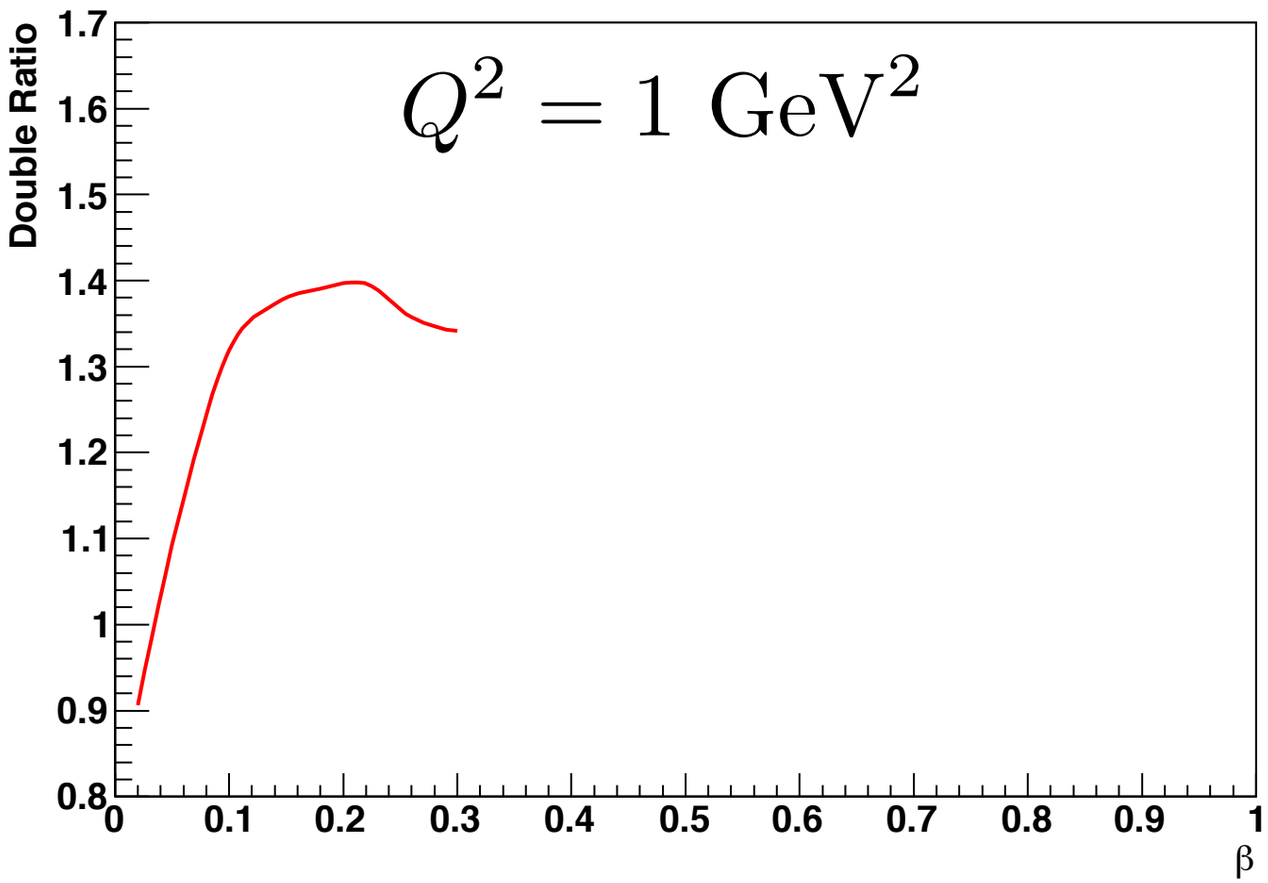

$Q^2 = 10$ GeV^2
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
β

$x = 10^{-3}$


$Q^2 = 1\ \mathrm{GeV}^2$
Double Ratio
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
β


$Q^2 = 5\ \mathrm{GeV}^2$
Double Ratio
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
β


$Q^2 = 10\ \mathrm{GeV}^2$
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
β


$Q^2 = 1\ \mathrm{GeV}^2$
Double Ratio
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
β

$x = 10^{-4}$